

## Two different routes of a phage cocktail administration to *Campylobacter* spp.-colonized broiler chickens

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Poultry meat is one of the most important sources of human campylobacteriosis, an acute bacterial enteritis considered a major problem worldwide. *Campylobacter* is a commensal organism that colonizes essentially the gastrointestinal tract of birds making treatment and prevention very difficult. Bacteriophages (phages) are naturally occurring predators of bacteria with high host specificity and capable to evolve to overcome bacterial resistance. Therefore, phage therapy can be a promising alternative to antibiotics in animal production. In the present study, a phage cocktail composed by three *Myoviridae* bacteriophages was administrated, by oral gavage and incorporated in chicken's food, to one-day old chicks experimentally colonized with *Campylobacter coli* or *Campylobacter jejuni*. The results indicate that the phage cocktail, when administrated by oral gavage, was able to reduce the levels of *Campylobacter coli* and *Campylobacter jejuni* by 2 log<sub>10</sub>. The cocktail given on feed caused a greater reduction in the *Campylobacter* counts, approximately 2.5 log<sub>10</sub>. Our results indicate that this phage cocktail can efficiently reduce the levels of *Campylobacter* contamination on poultry specially when incorporated in the chicken's food.